

SEARCH REQUEST FORM

Scientific and Technical Information Center

Access DB#

93684

Requester's Full Name: 12610MCH Examiner #: 69630 Date: 5/9/03
 Art Unit: 7651 Phone Number 308-0732 Serial Number: 09/626,566
 Mail Box and Bldg/Room Location: 11361 Results Format Preferred (circle): PAPER DISK E-MAIL
11D11

If more than one search is submitted, please prioritize searches in order of need.

 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

JAN

THIS IS A RESTRICTED VERSION OF A PREVIOUS SEARCH.

Thank
 RL

Jan Delaval
 Reference Librarian
 Biotechnology & Chemical Library
 CM1 1E07 - 703-308-4498
 jan.delaval@uspto.gov

STAFF USE ONLY

Searcher: Jan
 Searcher Phone #: 4498
 Searcher Location: _____
 Date Searcher Picked Up: 5/25/03
 Date Completed: 5/25/03
 Searcher Prep & Review Time: _____
 Clerical Prep Time: 20
 Online Time: 80

Type of Search

NA Sequence (#) _____ STN ☒
 AA Sequence (#) _____ Dialog _____
 Structure (#) ☒ Questel/Orbit _____
 Bibliographic _____ Dr.Link _____
 Litigation _____ Lexis/Nexis _____
 Fulltext _____ Sequence Systems _____
 Patent Family _____ WWW/Internet _____
 Other _____ Other (specify) _____

Vendors and cost where applicable



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 93688

TO: Ralph J Gitomer
Location: 11b01 / 11d11
Sunday, May 25, 2003
Au: 1651
Serial Number: 09 / 626566

From: Jan Delaval
Location: Biotech-Chem Library
CM1-1E07
Phone: 308-4498

jan.delaval@uspto.gov

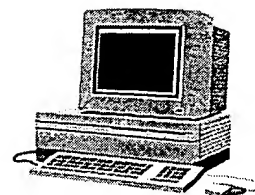
Search Notes

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 - 703-308-4498
jan.delaval@uspto.gov

BioTech-Chem Library

Search Results

Feedback Form (Optional)



Scientific & Technical Information Center

The search results generated for your recent request are attached. If you have any questions or comments (compliments or complaints) about the scope or the results of the search, please contact *the BioTech-Chem searcher* who conducted the search *or contact*:

Mary Hale, Supervisor, 308-4258
CM-1 Room 1E01

Voluntary Results Feedback Form

➤ *I am an examiner in Workgroup:* (Example: 1610)

➤ *Relevant prior art found, search results used as follows:*

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ *Relevant prior art not found:*

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Search results were not useful in determining patentability or understanding the invention.

Other Comments:

Drop off completed forms at the **Circulation Desk CM-1**, or send to Mary Hale, CM1-1E01 or e-mail mary.hale@uspto.gov.

=> fil reg

FILE 'REGISTRY' ENTERED AT 11:37:54 ON 25 MAY 2003
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 23 MAY 2003 HIGHEST RN 519387-75-8
DICTIONARY FILE UPDATES: 23 MAY 2003 HIGHEST RN 519387-75-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d his

(FILE 'HOME' ENTERED AT 11:09:25 ON 25 MAY 2003)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 11:09:44 ON 25 MAY 2003

E US99-146648/AP, PRN
L1 1 S E5
E WO2000-US20429/AP, PRN
L2 1 S E3, E4
L3 1 S L1, L2
SEL RN

FILE 'REGISTRY' ENTERED AT 11:10:23 ON 25 MAY 2003

L4 79 S E1-E79
L5 43 S L4 AND NC5-C6-C6/ES
L6 34 S L5 AND 46.150.18/RID
L7 9 S L5 NOT L6
L8 12 S L6 AND P/ELS
L9 0 S L8 AND NA/ELS
L10 2 S L8 AND S/ELS
L11 22 S L6 NOT L8
L12 5 S 324762-33-6 OR 324762-36-9 OR 324762-39-2 OR 324762-43-8 OR 3
L13 0 S C26H24NO11PS
L14 155 S NC5-C6-C6/ES AND 46.150.18/RID AND OC5/ES
L15 86 S L14 AND 5/NR
L16 17 S L15 AND IUM
L17 64 S L15 AND 2508.108/RID NOT L16
L18 57 S 2508.108/RID AND 46.150.18/RID AND (P AND S)/ELS AND 4/NR
SEL RN L12
L19 4 S E80-E84/CRN
L20 9 S L12, L19
L21 STR
L22 3 S L21
L23 100 S L21 FUL
SAV L23 GITOMER626/A
L24 STR L21
L25 0 S L24 CSS SAM SUB=L23
L26 29 S L24 CSS FUL SUB=L23

Jan Delaval
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Biotechnology & Chemical Library
CM1 1E07 - 703-308-4498
jan.delaval@uspto.gov

SAV L26 GITOMER626A/A
L27 11 S L23 AND P/ELS
L28 0 S L23 AND (OC4 OR OC5)/ES
L29 11 S L20,L27
L30 21 S L26 NOT L29
L31 68 S L23 NOT L26,L29

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L32 0 S L29

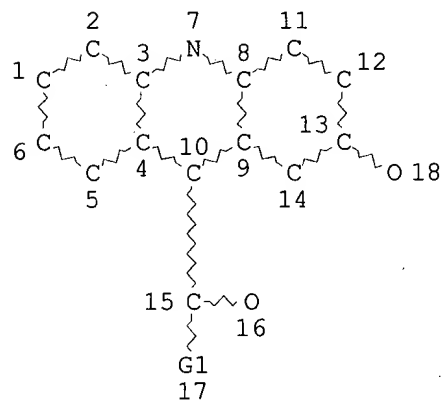
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L33 0 S L29

FILE 'HCAPLUS' ENTERED AT 11:37:31 ON 25 MAY 2003
L34 1 S L29

FILE 'REGISTRY' ENTERED AT 11:37:54 ON 25 MAY 2003

=> d sta que l26

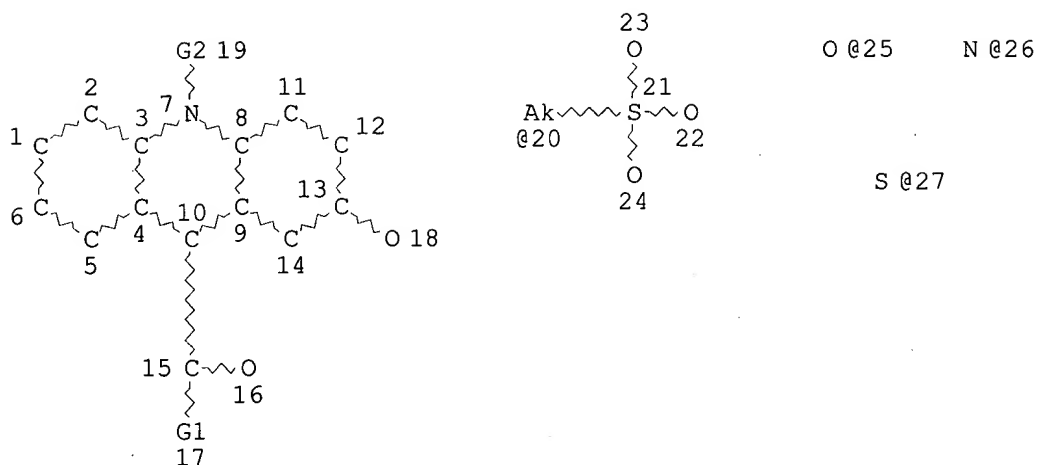
L21 STR



VAR G1=O/N/S
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 10
NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE
L23 100 SEA FILE=REGISTRY SSS FUL L21
L24 STR



VAR G1=25/26/27

VAR G2=AK/20

NODE ATTRIBUTES:

CONNECT IS M1 RC AT 18

CONNECT IS M1 RC AT 25

CONNECT IS M1 RC AT 26

CONNECT IS M1 RC AT 27

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 10

NUMBER OF NODES IS 27

STEREO ATTRIBUTES: NONE

L26 29 SEA FILE=REGISTRY SUB=L23 CSS FUL L24

100.0% PROCESSED 100 ITERATIONS

29 ANSWERS

SEARCH TIME: 00.00.01

=> d ide can tot 129

L29 ANSWER 1 OF 11 REGISTRY COPYRIGHT 2003 ACS

RN 324762-62-1 REGISTRY

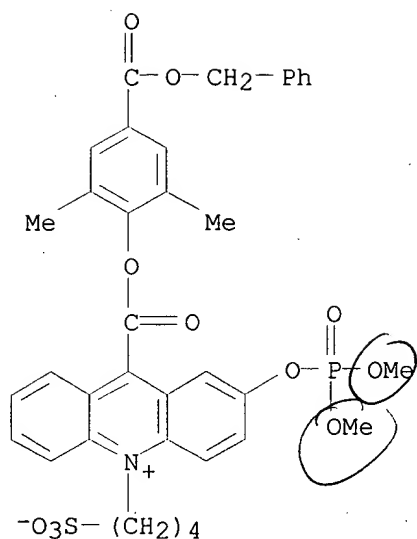
CN Acridinium, 2-[(dimethoxyphosphinyl)oxy]-9-[[2,6-dimethyl-4-[(phenylmethoxy)carbonyl]phenoxy]carbonyl]-10-(4-sulfobutyl)-, inner salt (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C36 H36 N O11 P S

SR CA

LC STN Files: CA, CAPLUS



Claim 43 H, no methoxy
 Fig 1 I has methoxy
 #4 pg 10
 no substituents on P

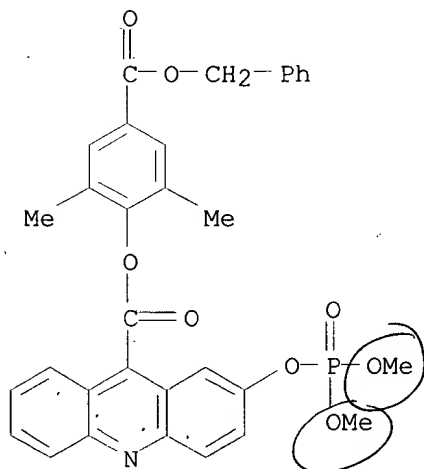
examples have methoxy
 claims do not

all examples + claims Na - not found
 no sugar found p10 spec no crystals
 found

1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:159459

L29 ANSWER 2 OF 11 REGISTRY COPYRIGHT 2003 ACS
 RN 324762-61-0 REGISTRY
 CN 9-Acridinecarboxylic acid, 2-[(dimethoxyphosphinyl)oxy]-,
 2,6-dimethyl-4-[(phenylmethoxy)carbonyl]phenyl ester (9CI) (CA INDEX
 NAME)
 MF C32 H28 N O8 P
 SR CA
 LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

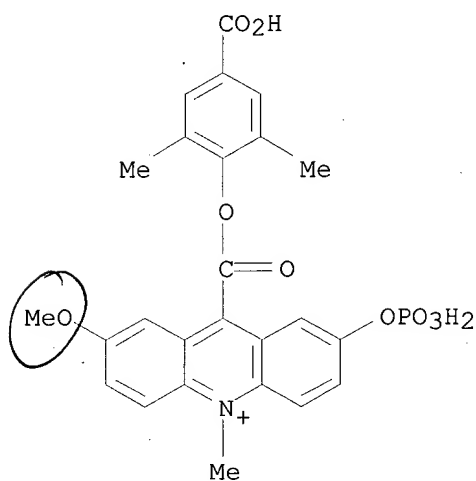
1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:159459

L29 ANSWER 3 OF 11 REGISTRY COPYRIGHT 2003 ACS
 RN 324762-46-1 REGISTRY
 CN Acridinium, 9-[(4-carboxy-2,6-dimethylphenoxy)carbonyl]-2-methoxy-10-methyl-7-(phosphonooxy)-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)
 MF C25 H23 N O9 P . C2 F3 O2
 SR CA
 LC STN Files: CA, CAPLUS

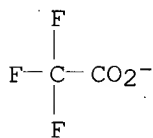
CM 1

CRN 324762-45-0
 CMF C25 H23 N O9 P



CM 2

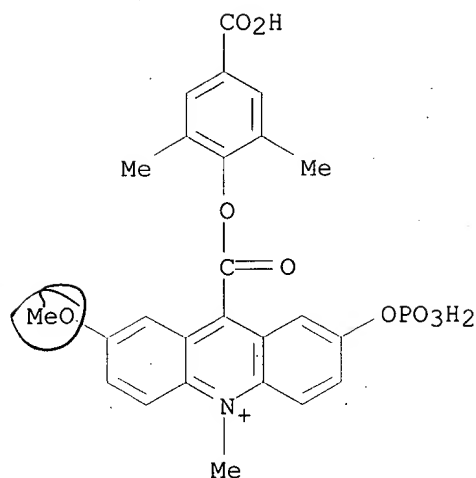
CRN 14477-72-6
 CMF C2 F3 O2



1 REFERENCES IN FILE CA (1957 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:159459

L29 ANSWER 4 OF 11 REGISTRY COPYRIGHT 2003 ACS
 RN 324762-45-0 REGISTRY
 CN Acridinium, 9-[(4-carboxy-2,6-dimethylphenoxy)carbonyl]-2-methoxy-10-methyl-7-(phosphonooxy)- (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C25 H23 N O9 P
 CI COM
 SR CA



L29 ANSWER 5 OF 11 REGISTRY COPYRIGHT 2003 ACS

RN 324762-43-8 REGISTRY

CN Acridinium, 9-[(4-carboxy-2,6-dimethylphenoxy)carbonyl]-2-(phosphonooxy)-10-(4-sulfobutyl)-, inner salt (9CI) (CA INDEX NAME)

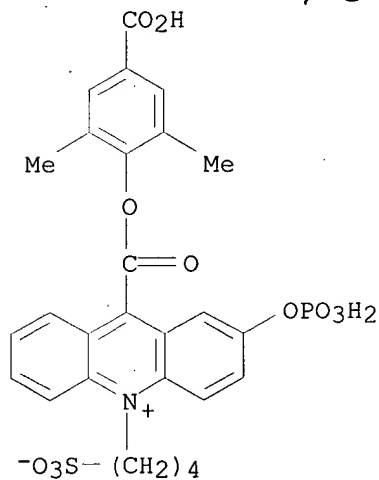
FS 3D CONCORD

MF C27 H26 N O11 P S

SR CA

LC STN Files: CA, CAPLUS

1 & parent



1 REFERENCES IN FILE CA (1957 TO DATE)

1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:159459

L29 ANSWER 6 OF 11 REGISTRY COPYRIGHT 2003 ACS

RN 324762-40-5 REGISTRY

CN Acridinium, 10-methyl-9-(phenoxyacetyl)-2-(phosphonooxy)-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

MF C21 H17 N O6 P . C2 F3 O2

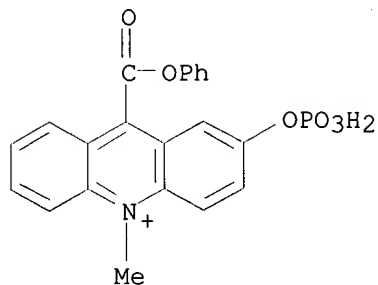
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 324762-39-2

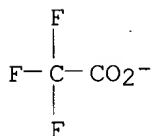
CMF C21 H17 N O6 P



CM 2

CRN 14477-72-6

CMF C2 F3 O2



1 REFERENCES IN FILE CA (1957 TO DATE)

1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:159459

L29 ANSWER 7 OF 11 REGISTRY COPYRIGHT 2003 ACS

RN 324762-39-2 REGISTRY

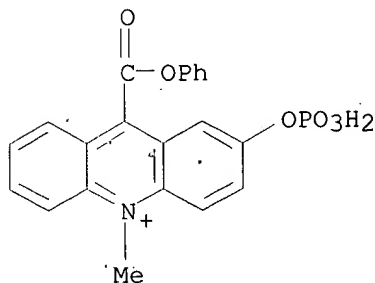
CN Acridinium, 10-methyl-9-(phenoxycarbonyl)-2-(phosphonooxy)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C21 H17 N O6 P

CI COM

SR CA



L29 ANSWER 8 OF 11 REGISTRY COPYRIGHT 2003 ACS

RN 324762-37-0 REGISTRY

CN Acridinium, 9-[[2,6-dimethyl-4-[(phenylmethoxy)carbonyl]phenoxy]carbonyl]-

10-methyl-2-(phosphonooxy)-, salt with trifluoroacetic acid (1:1) (9CI)
(CA INDEX NAME)

MF C31 H27 N O8 P . C2 F3 O2

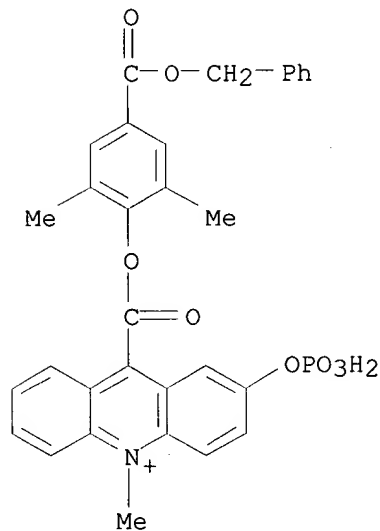
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 324762-36-9

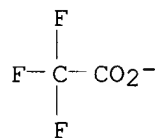
CMF C31 H27 N O8 P



CM 2

CRN 14477-72-6

CMF C2 F3 O2



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 134:159459

L29 ANSWER 9 OF 11 REGISTRY COPYRIGHT 2003 ACS

RN 324762-36-9 REGISTRY

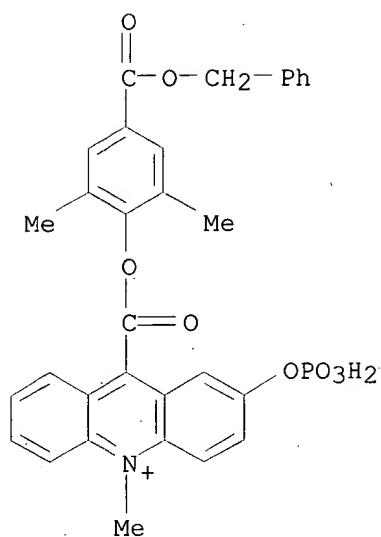
CN Acridinium, 9-[[2,6-dimethyl-4-[(phenylmethoxy)carbonyl]phenoxy]carbonyl]-
10-methyl-2-(phosphonooxy)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C31 H27 N O8 P

CI COM

SR CA



L29 ANSWER 10 OF 11 REGISTRY COPYRIGHT 2003 ACS

RN 324762-34-7 REGISTRY

CN Acridinium, 9-[(4-carboxy-2,6-dimethylphenoxy)carbonyl]-10-methyl-2-(phosphonoxy)-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

MF C24 H21 N O8 P . C2 F3 O2

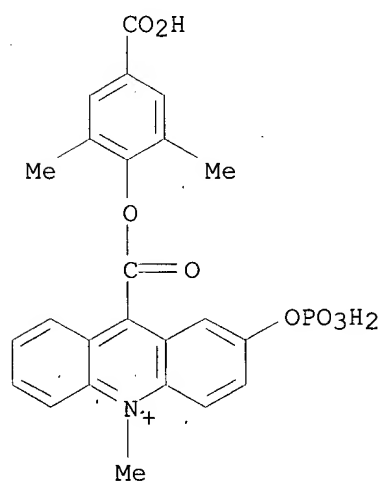
SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 324762-33-6

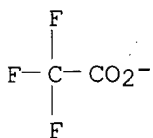
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CM 2

CRN 14477-72-6

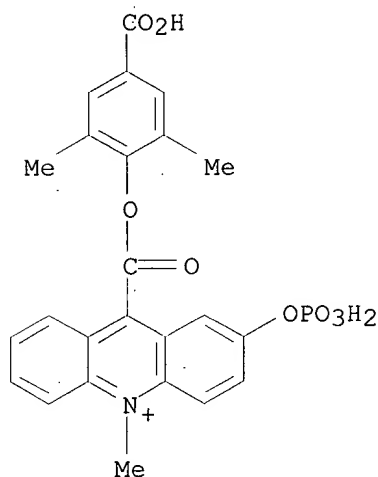
CMF C2 F3 O2



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE).

REFERENCE 1: 134:159459

L29 ANSWER 11 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN 324762-33-6 REGISTRY
CN Acridinium, 9-[(4-carboxy-2,6-dimethylphenoxy)carbonyl]-10-methyl-2-(phosphonooxy)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C24 H21 N O8 P
CI COM
SR CA



=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 11:38:16 ON 25 MAY 2003
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FILE COVERS 1907 - 25 May 2003 VOL 138 ISS 22
FILE LAST UPDATED: 23 May 2003 (20030523/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all hitstr 134

L34 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS

AN 2001:101348 HCAPLUS

DN 134:159459

TI Chemiluminescent substrates of hydrolytic enzymes such as phosphatases

IN Jiang, Qingping; Natrajan, Anand; Sharpe, David J.; Wong, Wen-jee; Law, Say-jong

PA Bayer Corporation, USA

SO PCT Int. Appl., 156 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C12Q001-42

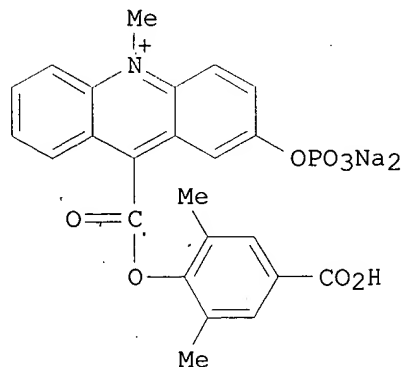
ICS C07D219-06

CC 7-1 (Enzymes)

Section cross-reference(s): 9, 27, 28

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001009372	A1	20010208	WO 2000-US20429	20000727
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1203091	A1	20020508	EP 2000-950764	20000727
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
PRAI	US 1999-146648P	P	19990730		
	WO 2000-US20429	W	20000727		
OS	MARPAT 134:159459				
GI					



AB Chemiluminescent substrates of hydrolytic enzymes are disclosed having the general Formula Lumi-M-P, where Lumi is a chemiluminescent moiety capable of producing light (a) by itself, (b) with MP attached and (c) with M

attached, wherein the different properties of Lumi-M-P and Lumi-M allow them to be distinguished. Lumi includes, but is not limited to, acridinium compds. (e.g. acridinium esters, carboxyamides, thioesters, and oxime esters), reduced forms thereof (e.g. acridans), and spiroacridan compds. M is selected from oxygen, nitrogen and sulfur. P is a group that can be readily removed by hydrolytic enzymes to give Lumi-M and P. The hydrolytic enzyme can be phosphatase, glycosidase, peptidase, protease, esterase, sulfatase, and guanidinobenzoatase. Thus, 2-Phos-DMAE (I) is synthesized and shown to be an excellent substrate of hydrolytic alk. phosphatase to form 2-OH-DMAE. Both I and 2-OH-DMAE are chemiluminescent, but emit light at different emission maxima when they are treated with H₂O₂ in strong alk. soln. I emits a strong, visible blue light at λ_{max} 478 nm while 2-OH-DMAE emits a strong, visible orange light at λ_{max} 602 nm, thus resulting in a bathochromic shift of emission max. by 128 nm. One of the advantages in using chemiluminescent acridinium substrates like I to detect hydrolytic enzymes is that the products generated by the enzyme can be accumulated without undergoing significant decompn. during the enzymic reaction. In addn., under certain conditions the chemiluminescence from I is selectively and significantly suppressed, and thereby the overall signal differentiation of 2-OH-DMAE over I is improved. A heterogeneous immunoassay is also provided demonstrating I utility as a substrate for the chemiluminescent detection of TSH in human serum.

- ST hydrolytic enzyme assay chemiluminescent substrate; acridinium chemiluminescent substrate hydrolytic enzyme assay; phosphatase assay chemiluminescent acridinium substrate
- IT Immunoassay
(TSH detection in human serum using acridinium substrate of alk. phosphatase; chemiluminescent substrates of hydrolytic enzymes such as phosphatases)
- IT Onium compounds
RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(acridinium; chemiluminescent substrates of hydrolytic enzymes such as phosphatases)
- IT Luminescence, chemiluminescence
(chemiluminescent substrates of hydrolytic enzymes such as phosphatases)
- IT Onium compounds
RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(isoquinolinium; chemiluminescent substrates of hydrolytic enzymes such as phosphatases)
- IT Onium compounds
RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(quinolinium; chemiluminescent substrates of hydrolytic enzymes such as phosphatases)
- IT 9001-78-9 9001-92-7, Proteinase 9013-05-2, Phosphatase 9013-79-0, Esterase 9027-41-2, Hydrolytic enzymes 9031-96-3, Peptidase 9032-92-2, Glycosidase 9068-67-1, Sulfatase 84419-03-4, Guanidinobenzoatase
RL: ANT (Analyte); ANST (Analytical study)
(chemiluminescent substrates of hydrolytic enzymes such as phosphatases)
- IT **324762-34-7P** 324762-52-9P 324762-55-2P 324762-58-5P
RL: ARG (Analytical reagent use); BPR (Biological process); BSU

(Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(chemiluminescent substrates of hydrolytic enzymes such as phosphatases)

IT 92-81-9DP, Acridan, compds. 229-87-8DP, Phenanthridine, compds.
260-94-6DP, Acridine, compds. 521-31-3DP, Luminol, compds.
2315-97-1DP, Lucigenin, compds. 3682-14-2DP, Isoluminol, compds.
12041-95-1DP, Benzacridine, compds.

RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(chemiluminescent substrates of hydrolytic enzymes such as phosphatases)

IT 324762-37-0P 324762-38-1P 324762-42-7P 324762-59-6P
RL: ARG (Analytical reagent use); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(chemiluminescent substrates of hydrolytic enzymes such as phosphatases)

IT 324762-35-8P 324762-40-5P 324762-43-8P 324762-44-9P
324762-46-1P 324762-48-3P 324762-49-4P 324762-50-7P
324762-54-1P 324762-56-3P

RL: ARG (Analytical reagent use); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(chemiluminescent substrates of hydrolytic enzymes such as phosphatases)

IT 91-56-5, Isatin 100-39-0, Benzyl bromide 104-92-7, 4-Bromoanisole
106-41-2, 4-Bromophenol 123-31-9, Hydroquinone, reactions 540-38-5,
4-Iodophenol 1633-83-6, 1,4-Butanesultone 3970-21-6,
Methoxyethoxymethyl chloride 5336-90-3, Acridine-9-carboxylic acid
6272-38-4, 2-(Benzyloxy)phenol 17789-14-9, 2-(3-Bromophenyl)-1,3-
dioxolane 39755-95-8, 5-Methoxyisatin 115853-69-5 151490-52-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(chemiluminescent substrates of hydrolytic enzymes such as phosphatases)

IT 6793-92-6P, 4-Benzyloxybromobenzene 108534-47-0P 112934-63-1P
130266-57-8P, 2-Methoxy-acridine-9-carboxylic acid 161006-15-1P
199190-18-6P 221057-35-8P 221057-36-9P 259169-12-5P 259169-13-6P
259169-43-2P 259169-44-3P 259169-45-4P 324762-60-9P
324762-61-0P 324762-62-1P 324762-63-2P 324762-64-3P
324762-65-4P 324762-66-5P 324762-67-6P 324762-69-8P 324762-70-1P
324762-71-2P 324762-72-3P 324762-74-5P 324762-75-6P 324762-76-7P
324762-77-8P 324762-79-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(chemiluminescent substrates of hydrolytic enzymes such as phosphatases)

IT 9002-71-5, TSH

RL: ANT (Analyte); ANST (Analytical study)

(detection in human serum using acridinium substrate of alk.

phosphatase; chemiluminescent substrates of hydrolytic enzymes such as phosphatases)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Akhavan-Tafti, H; US 5772926 A 1998 HCAPLUS
- (2) Bayer Ag; WO 0009487 A 2000 HCAPLUS
- (3) Corey, P; US 4810636 A 1989 HCAPLUS
- (4) Renault, J; EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY - CHIMICA THERAPEUTICA 1981, V16(1), P24 HCAPLUS
- (5) Say-Jong, L; US 4745181 A 1988 HCAPLUS
- (6) Sotiriou-Leventis, O; US 5656426 A 1997 HCAPLUS

(7) Syntex Inc; WO 9402486 A 1994 HCAPLUS

IT **324762-34-7P**

RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(chemiluminescent substrates of hydrolytic enzymes such as phosphatases)

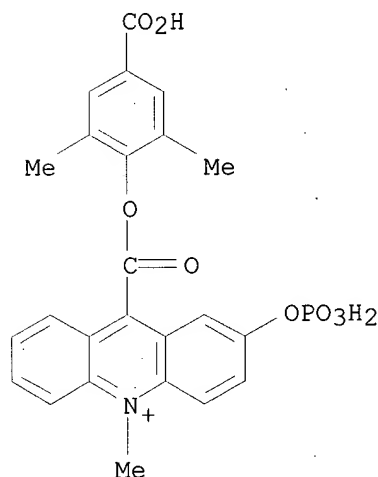
RN 324762-34-7 HCAPLUS

CN Acridinium, 9-[(4-carboxy-2,6-dimethylphenoxy)carbonyl]-10-methyl-2-(phosphonooxy)-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 324762-33-6

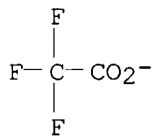
CMF C24 H21 N O8 P



CM 2

CRN 14477-72-6

CMF C2 F3 O2



IT **324762-37-0P**

RL: ARG (Analytical reagent use); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(chemiluminescent substrates of hydrolytic enzymes such as phosphatases)

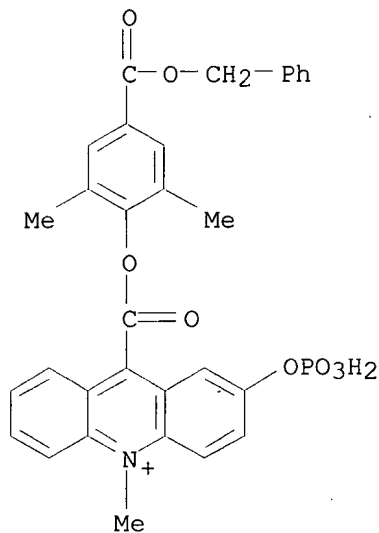
RN 324762-37-0 HCAPLUS

CN Acridinium, 9-[[2,6-dimethyl-4-[(phenylmethoxy)carbonyl]phenoxy]carbonyl]-10-methyl-2-(phosphonooxy)-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 324762-36-9

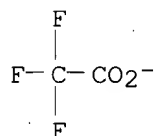
CMF C31 H27 N O8 P



CM 2

CRN 14477-72-6

CMF C2 F3 O2



IT 324762-40-5P 324762-43-8P 324762-46-1P

RL: ARG (Analytical reagent use); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses) (chemiluminescent substrates of hydrolytic enzymes such as phosphatases)

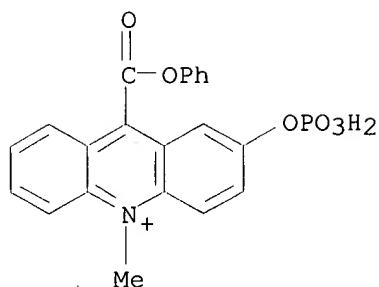
RN 324762-40-5 HCAPLUS

CN Acridinium, 10-methyl-9-(phenoxycarbonyl)-2-(phosphonoxy)-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN. 324762-39-2

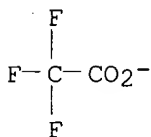
CMF C21 H17 N O6 P



CM 2

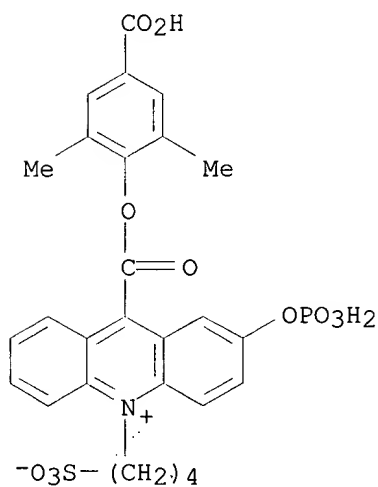
CRN 14477-72-6

CMF C2 F3 O2



RN 324762-43-8 HCAPLUS

CN Acridinium, 9-[(4-carboxy-2,6-dimethylphenoxy)carbonyl]-2-(phosphonooxy)-10-(4-sulfobutyl)-, inner salt (9CI) (CA INDEX NAME)



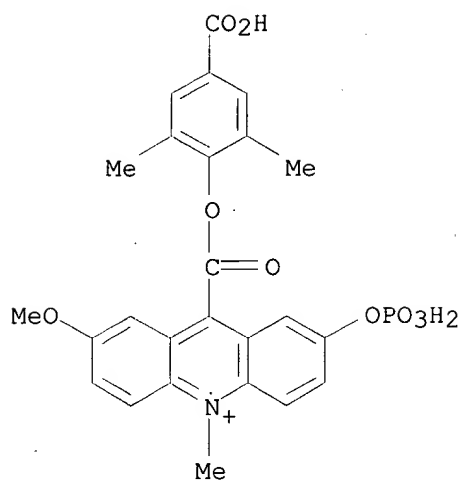
RN 324762-46-1 HCAPLUS

CN Acridinium, 9-[(4-carboxy-2,6-dimethylphenoxy)carbonyl]-2-methoxy-10-methyl-7-(phosphonooxy)-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 324762-45-0

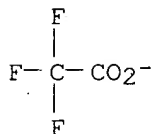
CMF C25 H23 N O9 P



CM 2

CRN 14477-72-6

CMF C2 F3 O2



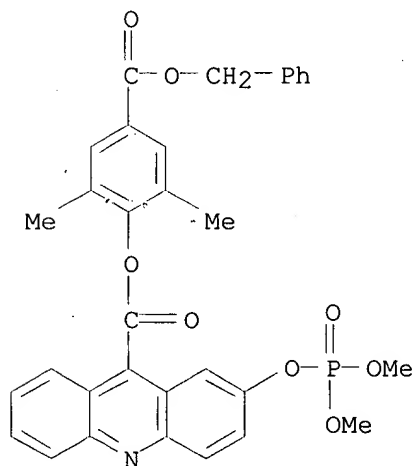
IT 324762-61-0P 324762-62-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(chemiluminescent substrates of hydrolytic enzymes such as phosphatases)

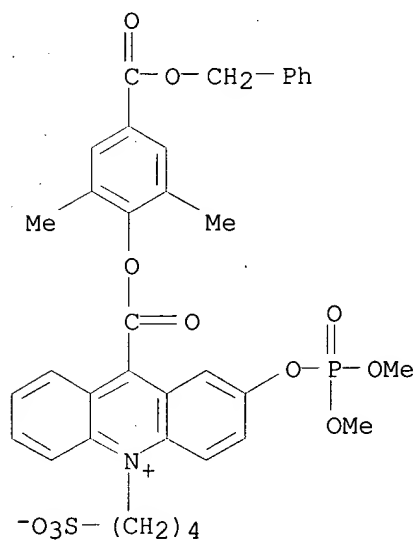
RN 324762-61-0 HCAPLUS

CN 9-Acridinecarboxylic acid, 2-[(dimethoxyphosphinyloxy]-, 2,6-dimethyl-4-[(phenylmethoxy)carbonyl]phenyl ester (9CI) (CA INDEX NAME)



RN 324762-62-1 HCAPLUS

CN Acridinium, 2-[(dimethoxyphosphinyl)oxy]-9-[[2,6-dimethyl-4-
[(phenylmethoxy)carbonyl]phenoxy]carbonyl]-10-(4-sulfobutyl)-, inner salt
(9CI) (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 11:47:13 ON 25 MAY 2003)
SET COST OFF

L1 FILE 'HCAPLUS' ENTERED AT 11:47:24 ON 25 MAY 2003
1 S 134:159459/DN
SEL RN

L2 FILE 'REGISTRY' ENTERED AT 11:47:34 ON 25 MAY 2003
79 S E1-E79
L3 0 S L2 AND NA/ELS

FILE 'HCAPLUS' ENTERED AT 11:47:44 ON 25 MAY 2003
E NATRAJAN A/AU
L4 21 S E3,E4
E SHARPE D/AU
L5 8 S E3,E7
L6 7 S E15,E19
E LAW S/AU
L7 25 S E3,E13
L8 38 S E30
E WONG W/AU
L9 46 S E3,E8
E WONG WEN/AU
L10 1 S E7
E JIANG Q/AU
L11 162 S E3
E JIANG QING/AU
L12 157 S E3,E8
L13 31 S E29
L14 22 S ENZYM?/SC, SX, CW, BI AND L4-L13
L15 17 S ?ACRIDIN? AND L4-L13
L16 24 S ?LUMINES? AND L4-L13
L17 31 S HET?/SC, SX AND L4-L13
L18 64 S L14-L17 NOT L1
E ONIUM/CT
L19 14 S E4+NT AND L4-L13
L20 13 S L19 NOT L1
L21 69 S L18, L20

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FILE 'HCAPLUS' ENTERED AT 11:51:15 ON 25 MAY 2003
SET SMARTSELECT ON
L22 SEL L21 1- RN : 844 TERMS
SET SMARTSELECT OFF

FILE 'REGISTRY' ENTERED AT 11:51:18 ON 25 MAY 2003
844 S L22
L24 154 S L23 AND NC5-C6-C6/ES
L25 2 S L24 AND P/ELS
L26 3 S L24 AND (OC4 OR OC5)/ES
L27 149 S L24 NOT L25, L26
L28 126 S L27 AND 46.150.18/RID
L29 1 S L24 AND NA/ELS